

U.S. Appln. No. 09/820,757 - HANADA et al.

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REMARKS

Applicants respectfully request the Examiner to reconsider and allow this application. If the case is not allowed, it would be appropriate to rescind any finality as a matter of equity due to the PTO's repeated failure to direct official correspondence to Applicants lawful representative. The Examiner's courtesy in the above regards is acknowledged in advance with appreciation.

The amended claims 1, 2 and 3 find basis in the specification throughout, including page 4, line 13 to page 5, line 13.

The Amendment recites a relation between the number of cell walls in the thickness direction of an expanded layer and in a direction perpendicular to the thickness direction. This is one of the important attributes of the present invention.

Applicants would greatly appreciate the Examiner's entering the amended claims. The amended claims are respectfully submitted in good faith with a view to constructively advancing prosecution and allowance. The number of claims submitted has not been increased. Accordingly, entering this Amendment and allowance would be in furtherance of the PTO's mission statement of helping its customers obtain patents.

The undersigned can be available for a personal interview.

Next, Applicants respectfully traverse the rejection of claims 1-12 under 35 U.S.C. §103(a) over U.S. Patent No. 5,882,782 ("Tsubone").

The Examiner states, in "Response to Arguments" in the outstanding Office Action, "Furthermore, one of the ordinary skill in the art would have determined the cell wall density ratio through routine experimentation depending on the desired end results as shown by Tsubone. Thus, it would have been obvious to one of ordinary skill in the art at the time the Applicants' invention was made to have determined the optimum or workable ranges depending on the desired end results as shown by Tsubone. Furthermore, it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art absence of showing unexpected results."

Applicants respectfully point out that Tsubone apparently teaches only that the scatter (or variation) of the peeling strength of a thermoplastic resin film laminated on the foamed resin sheet can be reduced by specifying the surface cell size and surface smoothness of the foamed resin sheet (column 3, lines 40-49). Tsubone neither describes nor would it have suggested considerations as to either the cell size or the cell wall thickness in the thickness

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direction of the foamed resin sheet, and therefore, there was no teaching of a variable to optimize. Consequently, there is no factual basis for the rate assertion discovery of result-effective variable(s) would have been obvious..

In the present invention, an effect achieved by the expansion ratio and the cell wall density ratio in combination is an improvement in thermal insulation property, which is quite different from the effect concerning the scatter of the peeling strength taught by Tsubone. Therefore, the present invention would not have been unforeseeable to a person of ordinary skill in the art in view of Tsubone.

The cell wall density ratio used in the present invention is, as defined in the amended claims, a ratio of the cell wall densities in two directions perpendicular to each other. Because the "cell wall density" indicates the number of the cell walls existing within a unit length of a foamed layer, the cell wall density ratio inherently depends not only on the cell size but also on the cell wall thickness. Accordingly, even if only the cell size, which is arguendo taught by Tsubone, were taken into consideration, a person skilled in the art would not have been directed to the present invention which has, as an essential feature, the cell wall density ratio defined by two cell wall densities which inherently depend on both cell size and cell wall thickness.

Having addressed all matters, a Notice of Allowance is earnestly, but respectfully solicited.

Respectfully submitted,

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